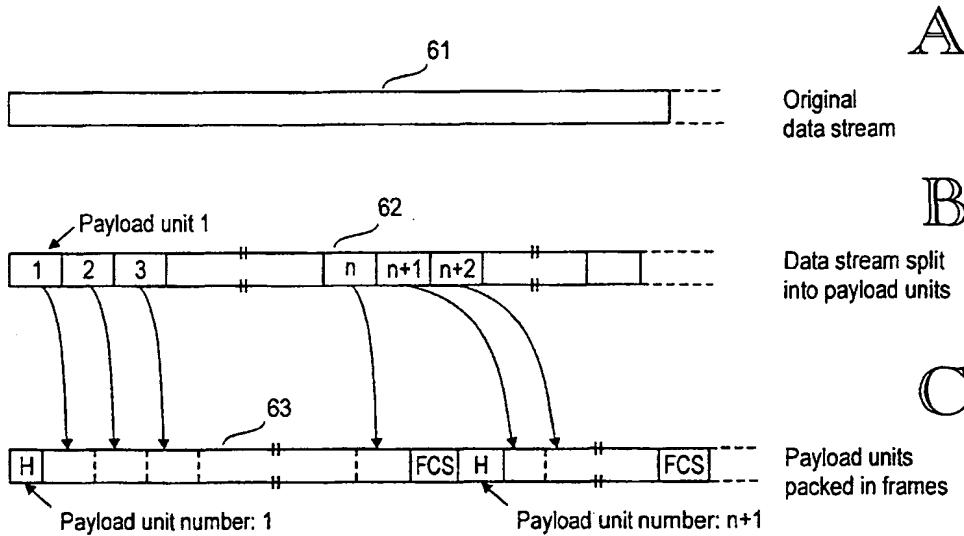


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(57) Abstract

The invention relates to data transmission in telecommunication systems and particularly in radio systems. The invention employs "payload numbering" instead of or in addition to conventional frame numbering. Data (61) is split into fixed-length data blocks or payload units (62). The size of a block is preferably equal to or smaller than the shortest information field in frames (63) of the protocol(s) used. Each protocol frame carries one or more payload units. In an optimum situation the length of the information field in a protocol frame equals $n *$ the length of the payload unit, where n is an integer. Instead of frame numbering (in some special cases possibly in addition to it) the protocol frame carries payload numbers both for indicating the payload units (data blocks) conveyed in the protocol frame and for acknowledging the received blocks.